



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,484	05/23/2001	Feng-Ting Pai	0941-0261P-SP	8958

2292 7590 07/25/2003

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

SHAPIRO, LEONID

ART UNIT	PAPER NUMBER
----------	--------------

2673

DATE MAILED: 07/25/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

13

Office Action Summary

Application No.

09/862,484

Applicant(s)

PAI ET AL.



Examiner

Leonid Shapiro

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 6-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Drawings

1. The corrected or substitute drawings were received and approved on 06-23-03. These drawings are Figures 4-8.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1,2,4,6-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 1 and 6 introduced new limitation: "pausing output of CPV, STV and OE until the end of the vertical blank period VB". This limitation is not supported in originally filed specification. In Figures 7-8 CPV, STV and OE not paused until the end of the vertical blank period VB, but items CPV, STV and OE are located inside of the vertical blank period VB (See Figs. 7-8, Items CPV, ST1, ST2, OE).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2673

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (APA).

As to claims 1 and 6, as best understood by examiner, APA teaches a method of processing signals of a timing controller of a liquid crystal display module, comprising the steps of: receiving a vertical synchronizing signal (See Fig. 3-4, items VSYNC, in description See from page 1, Line 27 to page 2, Line 6); receiving a data enable signal DE which has a vertical blank period, decoding the signal to generate a vertical synchronizing signal (See Fig. 3-4, items DE, VB, in description See from page 1, Line 27 to page 2, Line 6); generating a gate clock signal CPV which has a plurality gate clock cycles C1-Cn (See Fig. 3-6, item CPV, in description See page 2, Lines 4-24); after a rising edge or a falling edge of the vertical synchronizing signal generating a plurality of gate-on enable signals OE simultaneously according to the plurality of gate clock cycles C1-Cn of gate clock CPV (See Fig. 3-6, item OE, in description See page 2, Lines 4-24); after a rising edge or a falling edge of the vertical synchronizing signal generating start vertical signals STV before the end of the vertical blank period VB after at least a gate clock cycle C1 during vertical blank period VB (See Fig. 3-6, items STV1, STV2, in description See page 2, Lines 4-6).

Art Unit: 2673

APA teaches pausing output of STV1-STV2 until end of the vertical blank period VB (See Figs. 5-6, items ST1-ST2).

APA does not show pausing output of CPV and OE until end of the vertical blank period VB.

It would have been obvious to one of ordinary skill in the art at the time of invention to pause output of CPV and OE until end of the vertical blank period VB in APA apparatus. Such a modification would have been considered a mere design consideration fails to patentably distinguish over the APA.

As to claims 2, 7, as best understood by examiner, APA teaches start vertical signals STV are generated after at least a third cycle C3 after start VB during the vertical blank period VB (See Fig. 3-6, items STV1, STV2, in description See page 2, Lines 4-6).

As to claims 4,8, as best understood by the examiner, APA teaches a first start vertical signal STV1, for determining a start scan location of a frame; and a second start vertical signal STV2, for offsetting flicker and display brightness of the liquid crystal display (See Fig. 3-6, items STV1, STV2, in description See page 2, Lines 4-6).

Response to Amendment

4. Applicant's arguments filed on 06-23-03 have been fully considered but they are not persuasive.

On pages 8-9, Applicant's stated regarding claims 1, 6 that APA teaches a next control signal generated according to a memory value of a previous horizontal or vertical cycle, not in real time. However, the Figures 4-5 and descriptions of prior art identical to proposed invention

Art Unit: 2673

and responding to all limitations of claims 1 and 6, without any connections to the source of the signal.

On page 9, last paragraph Applicant's stated that APA does not disclose pausing output of STV until the end of the vertical blank period VB. However, APA shows pausing output of STV until the end of the vertical blank period VB (See rejection of claims 1 and 6 above).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2673


Telephone inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Is
July 22, 2003


BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600